

# DSI C-etch

## Ceramic Etching

Material safety data sheet (MSDS)  
Version 1.0 / EN

10/08/2022

## SECTION 1: PRODUCT AND COMPANY INFORMATION

### 1.1. Product identifier

Product Name	DSI C-Etch
Intended use	Porcelain etching solution
Structure	Liquid
Color	light yellow

### 1.2. Details of the supplier of the safety data sheet:

Company Name	DSI Ltd.
Company Address	59 haAvoda str., Ashdod 7706300 Israel
Contact Name	Shlomi Krasner
Phone / Fax	+972.893.172.35
E-mail	info@dsisrael.com

### Emergency telephone number:

Phone / Fax	+972.893.172.35
-------------	-----------------

## SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

### 2.1. Chemical characterization:

COMPONENTS	C.A.S.	% by Wt
Hydrofluoric acid	7664-39-3	25-30
Aluminium fluoride	7784-18-1	20-25
DM water	7732-18-5	45-50

## SECTION 3: HAZARDS IDENTIFICATION

### 3.1. Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazard Class  
Acute Toxicity  
Skin Corrosion / Serious  
Eye damage

Hazard Statement  
H300, H330, H310, H314

Restricted to use by dental professional only.

#### Hazard Statements

H300: Fatal if swallowed

H330: Fatal if inhaled.

H310: Fatal in contact with skin.

H314: Causes severe skin burns and eye damage.

#### Precautionary Statements

P260: Do not breathe dust/fume/gas/mist/vapors/spray

P262: Do not get in eyes, on skin or on clothing.

P264: Wash hands thoroughly after handling.

P280: Wear protective gloves, lab coat and eye/face protection.

P301+P310: If swallowed, IMMEDIATELY call a Poison Center or doctor/physician.

P302+P350: If on skin, gently wash with soap and water.

P304+340: If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338: If in eyes, rinse cautiously with water for several minutes.

## SECTION 4: FIRST AID MEASURES

### Description of first aid measures

Immediately remove any clothing soiled by the product.

Remove breathing equipment only after contaminated clothing have been completely removed. In case of irregular breathing or respiratory arrest provide artificial respiration.

- After inhalation: Supply fresh air or oxygen; call for doctor.

In case of unconsciousness place patient stable in side position for transportation.

- After skin contact: Immediately remove all soiled and contaminated clothing.

Seek immediate medical advice.

Immediately wash with water and soap and rinse thoroughly.

- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: Do not induce vomiting; call for medical help immediately.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

- Information for doctor: Most important symptoms and effects, both acute and delayed No further relevant information available.

- Indication of any immediate medical attention and special treatment needed

No further relevant information available.

## SECTION 5: MEASURES AND MEANS OF MAINTENANCE OF FIRE SAFETY

### Extinguishing media

Suitable extinguishing agents: Foam, dry chemical, carbon dioxide

Use fire extinguishing methods suitable to surrounding conditions.

Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

Advice for firefighters: Protective equipment: Mouth respiratory protective device.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

Environmental precautions: No special measures required.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralising agent.

Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.

## SECTION 7: HANDLING AND STORAGE

Handling:

Precautions for safe handling:

Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care.

Prevent formation of aerosols.

Information about fire - and explosion protection: Keep respiratory protective device available.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: Unsuitable material for receptacle: glass or ceramic.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: See product labeling.

Keep container tightly sealed.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

8.1. Ingredients with limit values that require monitoring at the workplace:

7664-39-3 Hydrofluoric Acid

Short-term value: 2.5 mg/m<sup>3</sup>, 3 ppm

Long-term value: 1.5 mg/m<sup>3</sup>, 1.8 ppm

8.2. Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Breathing equipment: Not required.

Protection of hands: The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

#### Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

#### Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Goggles recommended during refilling

## SECTION 9: PHYSICAL/CHEMICAL CHARACTERISTICS

### 9.1. Information on basic physical and chemical properties:

Form:	Liquid
Color:	light yellow
Odor:	Odorless
pH :	No data available
Danger of explosion:	Product does not present an explosion hazard.
Density:	
Relative density	Not determined
Vapor density	Not determined
Evaporation rate	Not determined
Partition coefficient	
(n-octanol/water):	Not determined
Viscosity:	Not determined

9.2. Other information : No further relevant information available.

## SECTION 10: STABILITY AND REACTIVITY

Reactivity No further relevant information available.

#### Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions:

Reacts with organic substances. Reacts with strong alkali.

Reacts with acids.

Reacts with certain metals.

Conditions to avoid: No further relevant information available.

Incompatible materials: No further relevant information available.

## SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

· LD/LC50 values relevant for classification:

ATE (Acute Toxicity Estimates)

Oral	LD50	51.4-58.2 mg/kg
Dermal	LD50	51.4-58.2 mg/kg
Inhalative	LC50/4 h	5.14-5.82 mg/l

11.2. Primary irritant effect:

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/irritation

Causes serious eye damage.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT-single exposure Based on available data, the classification criteria are not met.

STOT-repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard Based on available data, the classification criteria are not met.

## SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Behaviour in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Additional ecological information:

General notes:

Not hazardous for water.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Results of PBT and vPvB assessment

PBT: Not applicable.  
vPvB: Not applicable.  
Other adverse effects No further relevant information available.

## SECTION 13: DISPOSAL CONSIDERATION

Waste treatment methods

Recommendation: Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

## SECTION 14: TRANSPORT INFORMATION

Transport hazard class(es)

UN Class , Packaging Group : void

Special precautions for user

ADR – road : void

RID : void

IMDG – sea : void

IATA – air : void

Classified as non dangerous goods.

## SECTION 15: REGULATORY INFORMATION

Risk phrase R:34 (34 causes burns)  
R:36 Irritating to eyes  
R:37/38 Irritating to respiratory system and skin

Safety phrases S: 1/2, 26, 37/39, 45  
1/2 Keep locked out and out of the reach of children.  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
37/39 Wear suitable gloves and eye/face protection.  
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

## SECTION 16: OTHER INFORMATION

### Relevant phrases

H300 Fatal if swallowed.

H310 Fatal if contact with skin.

H314 Causes severe skin burns and eye damage.

H330 Fatal if inhaled.

### Abbreviations :

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative Acute Tox. 2: Acute toxicity - oral – Category 2 Acute Tox. 3:

Acute toxicity - oral – Category 3 Acute Tox. 1: Acute toxicity - dermal – Category 1

Skin Corr. 1A: Skin corrosion/irritation – Category 1A

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

---

### Disclaimer:

Since the working conditions of the final user are unknown, the information presented in this safety data sheet is based on the current level of our knowledge, based on national and general standards.

The product should not be used for any other purpose than those indicated under heading without first receiving written instructions for use. The user must take all necessary measures to comply with the requirements and rules of the law. The information in this safety data sheet should be considered as a description of the safety requirements that apply to our product and does not guarantee its properties.